



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2016-3983; Directorate Identifier 2015-NM-009-AD]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Airbus Model A330-200 Freighter series airplanes; Model A330-200 and A330-300 series airplanes; Model A340-200 and A340-300 series airplanes; Model A340-500 series airplanes; and Model A340-600 series airplanes. This proposed AD was prompted by a report indicating that, during an operational test of a ram air turbine (RAT), the RAT did not deploy in automatic mode. This proposed AD would require identification of the manufacturer, part number, and serial number of the RAT, and re-identifying and modifying the RAT if necessary. We are proposing this AD to prevent non-deployment of the RAT, which, if preceded by a total engine flame-out, or during a total loss of normal electrical power generation, could result in reduced control of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Airbus service information identified in this NPRM, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>. For Hamilton Sundstrand service information identified in this AD, contact Hamilton Sundstrand, Technical Publications, Mail Stop 302-9, 4747 Harrison Avenue, P.O. Box 7002, Rockford, IL 61125-7002; telephone 860-654-3575; fax 860-998-4564; email [tech.solutions@hs.utc.com](mailto:tech.solutions@hs.utc.com); Internet <http://www.hamiltonsundstrand.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3983; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-3983; Directorate Identifier 2015-NM-009-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

## **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2015-0008, dated January 15, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus Model A330-200 Freighter series airplanes; Model A330-200, and A330-300 series airplanes; Model A340-200, and A340-300 series airplanes; Model A340-500 series airplanes; and Model A340-600 series airplanes. The MCAI states:

During a scheduled Ram Air Turbine (RAT) operational test on an A330 aeroplane, the RAT did not deploy in automatic mode. The subsequent investigation conducted by the RAT manufacturer Hamilton Sundstrand (HS) and Arkwin Industries, revealed that this failure to deploy was due to an inadequate stroke margin in the manufacturing shimming procedure of the actuator deployment solenoids.

This condition, if not corrected, could possibly result in reduced control of the aeroplane, particularly if occurring following a total engine flame out, or during a total loss of normal electrical power generation.

Prompted by this unsafe condition, Airbus issued Service Bulletin (SB) A330-29-3126, SB A340-29-4097 and SB A340-29-5025, providing instructions to identify the manufacturer, part number (P/N) and serial number (s/n) of the RAT actuator, and to modify the shimming procedure for the affected RAT actuator.

For the reasons described above, this [EASA] AD requires identification of the affected RAT actuators and, depending on its configuration (modified or not), the accomplishment of applicable corrective actions [modifying the RAT actuator. Additional actions include re-identifying the RAT actuator part number and RAT part number, as applicable.]

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3983.

### **Related ADs**

EASA and the FAA have issued additional ADs related to the RAT. FAA AD 2012-21-19, Amendment 39-17235 (77 FR 65812, October 31, 2012, which corresponds to EASA AD 2011-0197, dated October 10, 2011), requires an inspection of the RAT anti-stall valve in the pump housing for correct setting, re-identification of the RAT pump, performing a functional ground test of the RAT, and replacement of the RAT pump or the RAT assembly with a serviceable part if necessary. FAA AD 2012-21-19 is applicable to all Airbus Model A330-200 Freighter series airplanes; Model A330-200 and -300 series airplanes; and Model A340-200 and -300 series airplanes.

The FAA also issued AD 2012-21-20, Amendment 39-17236 (77 FR 65799, October 31, 2012), which corresponds to EASA AD 2011-0204, dated October 14, 2011. FAA AD 2012-21-20 requires identification of the supplier, part number, and serial number of the RAT actuator; and re-identification of the RAT actuator and RAT, or replacement of the RAT actuator with a serviceable unit and re-identification of the RAT, if necessary. FAA AD 2012-21-20 is applicable to certain Airbus Model A330-200 Freighter series airplanes, Model A330-200 and -300 series airplanes, and Model A340-200, -300, -500, and -600 series airplanes.

In addition, the FAA issued AD 2015-26-02, Amendment 39-18350 (80 FR 81174, December 29, 2015), which corresponds to EASA AD 2013-0274, dated November 15, 2013). FAA AD 2015-26-02 requires, for certain airplanes, identification of the part number, serial number, and standard of the RAT pump, RAT module, RAT actuator, and RAT lower gearbox assembly; and corrective actions if necessary. For certain other airplanes, AD 2015-26-02 requires re-identification or replacement of the RAT module.

#### **Related Service Information under 1 CFR part 51**

Airbus has issued the following service information, which describes procedures for identifying the supplier, part number, and serial number of the installed RAT actuator; modifying the RAT; and re-identifying the RAT actuator and RAT.

- Service Bulletin A330-29-3126, dated June 12, 2014.
- Service Bulletin A340-29-4097, dated June 12, 2014.
- Service Bulletin A340-29-5025, dated June 16, 2014.

Hamilton Sundstrand has issued Service Bulletins ERPS06M-29-21, dated May 27, 2014; and ERPS33T-29-7, dated June 6, 2014. This service information describes procedures for identifying the affected RAT actuator and RAT part numbers and serial numbers, modifying affected actuators, and re-identifying affected RAT actuators and RATs.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **FAA’s Determination and Requirements of this Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

## **Costs of Compliance**

We estimate that this proposed AD affects 84 airplanes of U.S. registry.

We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$7,140, or \$85 per product.

In addition, we estimate that any necessary follow-on actions would take about 14 work-hours and require parts costing \$427,301, for a cost of \$428,491 per product. We have no way of determining the number of aircraft that might need actions.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.



## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Airbus:** Docket No. FAA-2016-3983; Directorate Identifier 2015-NM-009-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD affects AD 2012-21-19, Amendment 39-17235 (77 FR 65812, October 31, 2012); AD 2012-21-20, Amendment 39-17236 (77 FR 65799, October 31, 2012); and AD 2015-26-02, Amendment 39-18350 (80 FR 81174, December 29, 2015).

#### **(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1) through (c)(7) of this AD, certificated in any category.

(1) Airbus Model A330-223F and -243F airplanes, all manufacturer serial numbers; except those on which Airbus Modification 204067 has been embodied in production.

(2) Airbus Model A330-201, -202, -203, -223, and -243 airplanes, all manufacturer serial numbers; except those on which Airbus Modification 204067 has been embodied in production.

(3) Airbus Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, all manufacturer serial numbers; except those on which Airbus Modification 204067 has been embodied in production.

(4) Airbus Model A340-211, -212, and -213, airplanes, all manufacturer serial numbers.

(5) Airbus Model A340-311, -312, and -313 airplanes, all manufacturer serial numbers.

(6) Airbus Model A340-541 airplanes, all manufacturer serial numbers.

(7) Airbus Model A340-642 airplanes, all manufacturer serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 29, Hydraulic Power.

**(e) Reason**

This AD was prompted by a report indicating that, during an operational test of a ram air turbine (RAT), the RAT did not deploy in automatic mode. We are issuing this AD to prevent non-deployment of the RAT, which, if preceded by a total engine flame-

out, or during a total loss of normal electrical power generation, could result in reduced control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Identification and Replacement for Certain Airbus Model A330, and A340-200 and -300 Airplanes**

For Airbus Model A330-200 Freighter series airplanes, Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes: Within 30 months after the effective date of this AD, identify the supplier, part number, and serial number of the installed RAT actuator, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3126, dated June 12, 2014; or Airbus Service Bulletin A340-29-4097, dated June 12, 2014; as applicable.

(1) If the supplier identified is Arkwin Industries, and the identified RAT actuator part number and serial number are listed in Hamilton Sundstrand Service Bulletin ERPS06M-29-21, dated May 27, 2014, and the serial number is included in table 2 of Hamilton Sundstrand Service Bulletin ERPS06M-29-21, dated May 27, 2014, with a description of “correctly shimmed:” Within 30 months after the effective date of this AD, re-identify the actuator and the RAT, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3126, dated June 12, 2014; or Airbus Service Bulletin A340-29-4097, dated June 12, 2014; as applicable.

(2) If the supplier identified is Arkwin Industries, and the identified actuator RAT part number and serial number are listed in Hamilton Sundstrand Service Bulletin ERPS06M-29-21, dated May 27, 2014, and the serial number is included in table 2 of

Hamilton Sundstrand Service Bulletin ERPS06M-29-21, dated May 27, 2014, with a description of “incorrectly shimmed.” Within 30 months after the effective date of this AD, modify the RAT actuator and re-identify the RAT, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3126, dated June 12, 2014; or Airbus Service Bulletin A340-29-4097, dated June 12, 2014; as applicable.

(3) If the supplier identified is Arkwin Industries, and the identification plate for the RAT actuator is missing, or the part number and serial number are not listed in Hamilton Sundstrand Service Bulletin ERPS06M-29-21, dated May 27, 2014: Within 30 months after the effective date of this AD, modify the RAT actuator and re-identify the RAT, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3126, dated June 12, 2014; or Airbus Service Bulletin A340-29-4097, dated June 12, 2014; as applicable.

**(h) Identification and Replacement for Certain Airbus Model A340-500 and -600 Airplanes**

For Airbus Model A340-500 and -600 airplanes: Within 30 months after the effective date of this AD, identify the part number and serial number of the installed RAT actuator, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-29-5025, dated June 16, 2014.

(1) If the identified RAT actuator part number and serial number are listed in Hamilton Sundstrand Service Bulletin ERPS33T-29-7, dated June 6, 2014, and the serial number is included in table 2 of Hamilton Sundstrand Service Bulletin ERPS33T-29-7, dated June 6, 2014, with a description of “correctly shimmed.” Within 30 months after the effective date of this AD, re-identify the actuator and the RAT, in accordance with the

Accomplishment Instructions of Airbus Service Bulletin A340-29-5025, dated June 16, 2014.

(2) If the identified RAT actuator part number and serial number are listed in Hamilton Sundstrand Service Bulletin ERPS33T-29-7, dated June 6, 2014, and the serial number is included in table 2 of Hamilton Sundstrand Service Bulletin ERPS33T-29-7, dated June 6, 2014, with a description of “incorrectly shimmed:” Within 30 months after the effective date of this AD, modify the RAT actuator and re-identify the RAT, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-29-5025, dated June 16, 2014.

(3) If the identification plate for the RAT actuator is missing, or the part number and serial number are not listed in Hamilton Sundstrand Service Bulletin ERPS33T-29-7, dated June 6, 2014: Within 30 months after the effective date of this AD, modify the RAT actuator and re-identify the RAT, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-29-5025, dated June 16, 2014.

**(i) Terminating Action for Certain Requirements of Other ADs**

(1) For Airbus Model A330-200 Freighter, A330-200, and A330-300 series airplanes; and Model A340-200 and -300 series airplanes: Accomplishment of the actions required by paragraph (g)(1), (g)(2), or (g)(3) of this AD constitutes compliance with the requirements of paragraph (g)(1) of AD 2012-21-19, Amendment 39-17235 (77 FR 65812, October 31, 2012); paragraph (g) of AD 2012-21-20, Amendment 39-17236 (77 FR 65799, October 31, 2012); and paragraphs (g), (h), and (i) of AD 2015-26-02, Amendment 39-18350 (80 FR 81174, December 29, 2015), for that airplane only.

(2) For Airbus Model A340-500 and -600 series airplanes: Accomplishment of the actions required by paragraphs (h)(1), (h)(2), and (h)(3) of this AD constitutes compliance with the requirements of paragraphs (h)(1) and (h)(2) of AD 2012-21-20, Amendment 39-17236 (77 FR 65799, October 31, 2012); and paragraph (j) of AD 2015-26-02, Amendment 39-18350 (80 FR 81174, December 29, 2015), for that airplane only.

**(j) Parts Installation Limitations**

As of the effective date of this AD, no person may install any RAT actuator or any RAT having a part number identified in table 1 to paragraph (j) of this AD, on any airplane, unless it meets the conditions specified in paragraph (j)(1) or (j)(2) of this AD, as applicable.

**Table 1 to paragraph (j) of this AD – *Affected Part Numbers***

<b>Affected Airbus airplane models</b>	<b>RAT part number</b>	<b>RAT actuator part number</b>
Model A330-200 and -300 series airplanes	1720934C 1720934D 766351A 768084A 770379A 770952C 770952D 770952E	5912958 5915768
Model A330-200 Freighter series airplanes	1720934C 1720934D 766351A 768084A 770379A 770952C 770952D 770952E	5912958 5915768

<b>Affected Airbus airplane models</b>	<b>RAT part number</b>	<b>RAT actuator part number</b>
Model A340-200 and -300 series airplanes	1720934C 1720934D 766351A 768084A 770379A 770952C 770952D 770952E	5912958 5915768
Model A340-500 and -600 series airplanes	772722H 772722J 772722L	5912536 5915769

(1) For Airbus Model A330-200 Freighter series airplanes; Model A330-200, and A330-300 series airplanes; and Model A340-200 and -300 series airplanes: The RAT actuator or RAT has a serial number listed as affected and modified in Hamilton Sundstrand Service Bulletin ERPS06M-29-21, dated May 27, 2014, and the RAT has been re-identified in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3126, dated June 12, 2014; or Airbus Service Bulletin A340-29-4097, dated June 12, 2014.

(2) For Airbus Model A340-500 and -600 series airplanes: The RAT actuator or the RAT has a serial number listed as affected and modified in Hamilton Sundstrand Service Bulletin ERPS33T-29-7, dated June 6, 2014, and the RAT has been re-identified in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-29-5025, dated June 16, 2014.

**(k) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(3) Required for Compliance (RC):** If any Airbus service information contains procedures or tests that are identified as RC, those procedures and tests must be done to



comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(l) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0008, dated January 15, 2015, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3983.

(2) For Airbus service information identified in this proposed AD, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>. For Hamilton Sundstrand service information identified in this AD, contact Hamilton Sundstrand, Technical Publications, Mail Stop 302-9, 4747 Harrison Avenue, P.O. Box 7002, Rockford, IL 61125-7002; telephone 860-654-3575; fax 860-998-4564; email [tech.solutions@hs.utc.com](mailto:tech.solutions@hs.utc.com); Internet <http://www.hamiltonsundstrand.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on February 19, 2016.

Dorr M. Anderson,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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